WHAT IS CLAIMED IS:

1. A method for applying flux for use in brazing aluminum material, comprising steps of:

uniformly dispersing and mixing fluoride-based flux in and with synthetic resin which has fluidity at room temperature and sublimes at a temperature lower than a brazing temperature, to thereby produce a mixture of the flux and the synthetic resin, wherein an amount of the fluoride-based flux is set to 40 to 70 wt.% of the mixture;

applying the mixture to a travelling coating belt; and

transferring the mixture to a surface of the aluminum material.

2. A method according to claim 1, further comprising a step of making one side of the coating belt facing the aluminum material being formed from elastic material deflecting by pressing force from the aluminum material at said transferring step.

3. A method according to claim 1, wherein said synthetic resin comprises polybutene.

4. A method according to claim 1, wherein the amount of the fluoride-based flux is set to 50 to 70 wt.% of the mixture.

5. A flux coating apparatus comprising:

a pair of feed rollers to be rotated in opposite

directions while remaining in contact with each other;

an inlet section disposed above a contact portion between said pair of feed rollers so as to store slime-like coating material containing flux;

a dam member disposed along and sliding contact with end faces of the pair of feed rollers so as to prevent the coating material from flowing laterally from said inlet section; and

a pair of endless coating belts which are spaced at a required interval so as to be mutually opposed and rotated in opposite directions, wherein at least one of said pair of feed rollers is in contact with at least one of said pair of endless coating belts, thereby transferring the coating material to a surface of said endless coating belt, and wherein the surface of the endless coating belt coated with the coating material comes into contact with an introduced component to be coated with the coating material, to thereby coat a surface of the component with the coating material during a course of feeding of the component in a single direction.

2 ~~6~~. A flux coating apparatus according to claim ~~5~~ 1, further comprising a flux guide for collecting the coating material adhering to the surface of said endless coating belt to a required width.

3 ~~7~~. A flux coating apparatus according to claim ~~5~~ 1, wherein said pair of endless coating belt comprises a lower endless coating belt and an upper endless coating belt to be mutually opposed in a vertical direction, said lower endless

coating belt extends longer than said upper endless coating belt in a direction from which the component is introduced, to thereby constitute a component inlet section for receiving the component.

4 ~~8~~. A flux coating apparatus according to claim ~~5~~ 1, wherein a pair of said dam members are disposed on both opposite ends of said pair of feed rollers

5 ~~9~~. A flux coating apparatus according to claim ~~5~~ 1, wherein said endless coating belt comprises elastic material so that the surface of the endless coating belt comes into elastic contact with the introduced component.

6 ~~10~~. A flux coating apparatus according to claim ~~5~~ 1, further comprising a pair of presser plates for pressing opposing portions of said endless coating belts against the introduced component.

7 ~~11~~. A flux coating apparatus according to claim ~~10~~ 6, wherein a clearance between the pair of presser plates in a vicinity of a component inlet side is set greater than a height of the introduced component.

8 ~~12~~. A flux coating apparatus according to claim ~~11~~ 7, wherein end portions at the component inlet side of respective presser plates are tapered outward.

13. A flux coating apparatus according to claim ~~10~~, wherein said pair of presser plates are vertically adjustable.

14. A flux coating apparatus comprising:

a pair of endless coating belts which are vertically spaced at a predetermined interval so as to be mutually opposed and rotated in opposite directions, said endless coating belts being brought into contact with top peaks of a corrugated component to be introduced between a clearance between opposing portions of said endless coating belts, and applying slime-like coating material containing flux to the top peaks during a course of feeding the corrugated component in a single direction; and

a pair of presser plates for pressing the opposing portions of said endless coating belts against the top peaks of the corrugated component.

15. A flux coating apparatus according to claim 14, wherein a clearance between the pair of presser plates in a vicinity of a component inlet side is set greater than a height of the corrugated component.

16. A flux coating apparatus according to claim 15, wherein end portions at the component inlet side of respective presser plates are tapered outward.

17. A flux coating apparatus according to claim 14, wherein said pair of presser plates are vertically adjustable.

18. A flux coating apparatus according to claim 14, wherein said endless coating belt comprises elastic material so that the surface of the endless coating belt is elastically brought into contact with the top peaks of the corrugated component.

19. A method for manufacturing a heat exchanger, comprising steps of:

applying slime-like coating material containing flux to top peaks of corrugated fins;

stacking a plurality of said corrugated fins and a plurality of flat tubes in an alternating manner to thereby constitute a core;

inserting ends of said flat tubes of the core into tube insertion holes of header tanks; and

heating the core, thereby brazing together the top peaks of the corrugated fins and the flat tubes.

20. A method for manufacturing a heat exchanger according to claim 19, further comprising a step of applying the slime-like coating material to one of peripheral edges of the tube insertion holes formed in the header tanks and the ends of the flat tubes before said heating, so that the peripheral edges of the tube insertion holes of the header tanks and the ends of the respective flat tubes are brazed at said heating step.

21. A method for manufacturing a heat exchanger

according to claim 19, wherein the slime-like flux is applied to the top peaks of said corrugated fins between the endless coating belt.